

Application No. 10/658,089  
Response dated December 15, 2006  
Reply to Office Action of Sept 18, 2006

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#### REMARKS

Claims 1-49 are currently pending; claims 50-53 are withdrawn as being directed to a non-elected invention.

#### Rejection of Claims 19-32 Under § 112

The Examiner rejected claims 19-32 under 35 U.S.C. § 112, second paragraph on the grounds that the use of the term "adapted and configured" renders the claim indefinite. The Examiner asserts that "[t]he term 'adapted and configured' in the claims is a relative term which renders the claim[s] indefinite." The Examiner recites the following support for his position: (1) "The term 'adapted and configured' is not defined by the claim;" (2) the specification does not provide a standard for "ascertaining the requisite degree;" and (3) one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. (Office Action at p. 2)

First, there is no requirement in § 112 or the case law interpreting it that a claim contain a definition for any of its terms. The term "adapted and configured" can easily be understood by a skilled artisan.

The Examiner's second point makes no sense: Of what (or for what) must the specification provide the standard for ascertaining a requisite degree?

Finally, there can be no serious argument that a skilled artisan would not understand the scope of each of claims 19-32 simply because of the use of the structural limitation "adapted and configured" in the claims. When read in light of the specification, the scope of each of these claims is clear. There is no need for these claims to specifically recite any more structure than each of them already does in order to meet the requirements of § 112. The Examiner's rejection of claims 19-32 under § 112, second paragraph, is inappropriate and should be withdrawn.

#### Rejection of Claim 49 Under § 112

The Examiner rejected claim 49 under § 112, second paragraph, and suggested that the claim be reworded as a Markush group. Applicant has amended claim 49 to address the Examiner's rejection. Claim 49, as amended, meets the definiteness requirements of § 112.

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### **Rejection of Claims 2-4 Under § 101**

The Examiner rejected claims 2-4 under 35 U.S.C. § 101 on the basis that the claims are directed to non-statutory subject matter because of their recitations of parts of "the in vivo body structure as part of applicant's device." (Office Action at p. 3) In fact, however, these claims recite the left and right *prosthesis* bodies, not the vertebral body. Claims 2-4 are in fact directed to statutory subject matter. The Examiner's rejection of these claims is improper and should be withdrawn.

### **Rejection of Claims 1 and 33 Over Martin**

The Examiner rejected claims 1 and 33 under 35 U.S.C. § 102(b) as being anticipated by Martin WO 95/05783 ("Martin"). The Examiner states that Martin discloses a device including an "artificial joint structure" carried by a fastening element. (Office Action at p. 4) Claim 1 recites "an artificial left facet joint structure . . . adapted and configured to replace a cephalad portion of the left natural facet joint" and "an artificial right facet joint structure . . . adapted and configured to replace a cephalad portion of the right natural facet joint." The Examiner has not pointed to any part of Martin's disclosure (which, except for the abstract, is in French) disclosing left or right artificial facet joint structures. Martin does not anticipate claims 1 or 33. This basis of the Examiner's rejection is improper and should be withdrawn.

### **Rejection of Claims 1-4, 12-18, 34-38 and 46-49 Over Zang, Wall, Homsy or Morgan Under § 102(b)**

The Examiner rejected claims 1-4, 12-18, 34-38 and 47-49 under 35 U.S.C. § 102(b) over any of Zang US 5,314,486 ("Zang"), Wall US 4,693,722 ("Wall"), Homsy US 4,778,472 ("Homsy") or Morgan US 4,917,701 ("Morgan"). In his accompanying remarks, the Examiner also made reference to claim 46. Applicant assumes the Examiner intended to include claim 46 in this listing of claims rejected under § 102(b) as well.

The Examiner contends that the prostheses disclosed by each of these references (1) "is structurally similar to that illustrated by applicant" and (2) "is capable of performing the function of replacing all or a portion of the natural facet joint." (Office Action at pp. 4-5) The Examiner's first point, however, misstates the requirements for anticipation. The question of anticipation

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under § 102 is not whether the reference discloses a device that is “structurally similar” to the device illustrated in Applicant’s figures but is rather whether the reference discloses each and every feature recited by the claims. The Examiner’s analysis does not even address the elements of claim 1.

The Examiner’s second point is even more remarkable. Wall, Homsy and Morgan disclose temporomandibular joint prostheses. Zang discloses a metatarso-phalangeal joint prosthesis. The Examiner was not able to point to any disclosure in any of these references to support his contention that each of these prostheses could be implanted into a patient’s spine to perform the function of replacing all or a portion of a natural facet joint.

Claim 1 recites a prosthesis with left and right prosthesis bodies accommodating fixation to a vertebral body at or near a pedicle and without support by a lamina. The Examiner’s action does not explain how any of these references discloses these elements. Claim 1 further recites left and right artificial facet joint structures carried by the prosthesis bodies that are adapted and configured to replace cephalad portions of natural facet joints. None of these references discloses these elements either.

With respect to claims 2-4, the Examiner states that the claims are directed to a surgical step of attaching the assembly to the spinal structure. (Office Action at p. 5) In fact, however, these claims address how the prosthesis assembly’s facet joint structures are fixed to the prosthesis assembly’s prosthesis bodies. The Examiner has misread these claims.

For at least these reasons, claims 1-4, 12-18, 34-38 and 46-49 are patentable over Zang, Wall, Homsy and Morgan under § 102 (b).

**Rejection of claims 19-32 over Zang, Wall, Homsy or Morgan under § 102(b) or § 103(a)**

The Examiner rejected claims 19-32 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over any of Zang, Wall, Homsy or Morgan. The Examiner’s remarks, however, appear to be directed to claims 2-17. In any event, the Examiner’s argument is identical to the argument he used in support of the rejection of claims 19-32 under § 112(b): (1) “The term ‘adapted and configured’ is not defined by the claim;” (2) the specification does not provide a standard for “ascertaining the requisite degree;” and (3) one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. (Office

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Action at p. 6) The Examiner's argument does not even attempt to address the statutory requirements of §§ 102 or 103. Applicant therefore respectfully requests that the Examiner issue a new non-final office action identifying which claims he intended to reject and using the correct statutory basis for that rejection.

**Rejection of claims 4-7 and 39-41 in view of Zang and Johnson**

The Examiner rejected claims 4-7 and 39-41 under 35 U.S.C. § 103(a) as being unpatentable over Zang as applied to claim 1 and further in view of Johnson US 5,609,641 ("Johnson"). As discussed above, the Examiner never did apply Zang or any other reference specifically to claim 1. Nonetheless, Johnson fails to cure the deficiencies of Zang with respect to the elements of claim 1, from which each of these claims depend. Claim 1 recites a prosthesis with left and right prosthesis bodies accommodating fixation to a vertebral body at or near a pedicle and without support by a lamina and left and right artificial facet joint structures carried by the prosthesis bodies that are adapted and configured to replace cephalad portions of natural facet joints. Neither Zang nor Johnson, alone or in combination, discloses any of these elements. For at least these reasons, the Examiner's rejection of claims 4-7 and 39-41 under § 103(a) over Zang and Johnson is improper and should be withdrawn.

**Rejection of claims 8-11 and 42-45 in view of Zang and Carignan**

The Examiner rejected claims 8-11 and 42-45 under 35 U.S.C. § 103(a) as being unpatentable over Zang as applied to claim 1 and further in view of Carignan US 4,955,916 ("Carignan"). As discussed above, the Examiner never did apply Zang or any other reference specifically to claim 1. Nonetheless, Carignan fails to cure the deficiencies of Zang with respect to the elements of claim 1, from which each of these claims depend. Claim 1 recites a prosthesis with left and right prosthesis bodies accommodating fixation to a vertebral body at or near a pedicle and without support by a lamina and left and right artificial facet joint structures carried by the prosthesis bodies that are adapted and configured to replace cephalad portions of natural facet joints. Neither Zang nor Carignan, alone or in combination, discloses any of these elements. For at least these reasons, the Examiner's rejection of claims 8-11 and 42-45 under § 103(a) over Zang and Carignan is improper and should be withdrawn.

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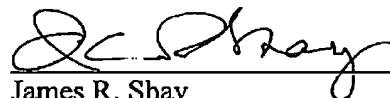
**CONCLUSION**

For the reasons stated above, claims 1-49 meet the requirements of §§ 101 and 112 and are patentable over the prior art of record under §§ 102 and 103. Applicant respectfully requests the Examiner to allow these claims and to pass this case to issue.

Respectfully submitted,

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